

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently amended) Water-thinnable polyurethane with at least two free OH groups obtained from a first conversion of a primary and/or secondary alkanolamine with a NCO compound giving an intermediate product, followed by the addition of a cyclic carboxylic anhydride to the intermediate product; wherein the NCO compound has at least one free NCO group and no blocked NCO group, and the NCO compound is obtained by reacting at least one polyol with at least one polyisocyanate, in which the polyol is saturated polyester polyol or saturated polyether polyol; all alkanolamine being converted during the first conversion to the intermediate product such that the nitrogen atom of the alkanolamine reacts with one of the free NCO groups of the ~~prepolymer~~ the NCO compound to form a urea bond; and the cyclic carboxylic anhydride reacting, with ring opening, with the OH group, originating from the alkanolamine, of the intermediate product.

2. (Original) Water-thinnable polyurethane according to claim 1 wherein the NCO compound does not exhibit any OH group.

3. (Original) Water-thinnable polyurethane according to claim 1 wherein the NCO compound is modified by at least one alkoxypoly(oxyalkylene) alcohol.

4. (Original) Water-thinnable polyurethane according to claim 1 wherein the NCO compound is a prepolymer.

5. (Original) Water-thinnable polyurethane according to claim 1 wherein the NCO compound exhibits at least two free NCO groups.

6. (Original) Water-thinnable polyurethane according to claim 1 wherein at least one OH group of the alkanolamine is linked with its nitrogen atom via a substituted or non-substituted alkyl group with 2 to 6 carbon atoms in the main chain.

7. (Original) Water-thinnable polyurethane according to claim 1 wherein OH groups originating from the alkanolamine are fully or partially secondary.

8. (Original) Water-thinnable polyurethane according to preceding claims characterised in that claim 1 wherein alkanolamine is diethanolamine and/or diisopropanolamine.

9. (Original) Water-thinnable polyurethane according to claim 1 wherein it has an acid number of at least 10 mg KOH/g, in particular of at least 20 mg KOH/g.

10. (Original) Water-thinnable polyurethane according to claim 1 wherein the polyurethane has a number average molecular weight of between 500 and 10,000, in particular between 1,000 and 4,000.

11. (Original) Water-thinnable polyurethane according to claim 1 wherein the cyclic carboxylic anhydride is selected from the group of phthalic anhydride, hexahydrophthalic anhydride, tetrahydrophthalic anhydride, methyl hexahydrophthalic anhydride, succinic anhydride and maleic anhydride.

12. (Currently amended) Water-thinnable polyurethane according to claim 1 wherein the cyclic carboxylic anhydride is ~~trimellitic~~ trimellitic anhydride.

13. (Original) A method, comprising contacting a water-thinnable polyurethane according claim 1 with a melamine resin for the production of hot curing coating compositions.

14. (Original) A method, comprising contacting a water-thinnable polyurethane according to claim 13 characterised in that the melamine resin is a highly alkylated melamine resin.

15. (Original) A method according to claim 14 wherein the melamine resin is one without NH groups.

16. (Original) A method according to claim 13 wherein the crosslinking temperature is less than 145°C.

17. (Original) A method according to claim 13 wherein the crosslinking temperature is more than 180°C.

18. (Original) A method, comprising preparing a coating composition by including in the composition a water-thinnable polyurethane according to claim 1.

19. (Original) Water-thinnable polyurethane according to claim 2 wherein the NCO compound is modified by at least one alkoxypoly(oxyalkylene) alcohol.

20. (Original) A method according to claim 15 wherein the melamine resin is hexamethoxymethyl melamine.